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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,015	01/26/2001	Eric K. Wilson	23600.00101	6355

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EXAMINER

PHU, SANH D

ART UNIT PAPER NUMBER

2682

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/771,015

Applicant(s)

WILSON ET AL.

Examiner

Sanh D Phu

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This Office Action is responsive to the Election filed on 1/3/05.

Accordingly, claims 1-7 have been selected, and claim 8-11 are withdrawn from further consideration.

#### *Information Disclosure Statement*

2. The IDS filed 1/3/2002 has been received and recorded in the file, however, the foreign patent documents and non-patent literature documents have not been considered because of none of copies of the documents are submitted from applicant.

#### *Claim Rejections – 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1–3 rejected under 35 U.S.C. 102(e) as being anticipated by Miyashita et al (6,813,326).

–Regarding to claim 1, Miyashita et al disclose a wireless modem unit (WMU) comprising:

- a processor(7, 8, 9, see Fig. 1);
- a modulator (1, see Fig. 1) controlled by the processor;
- a pre-preamble modulator (6, see Fig. 1) controlled by the processor;
- a summation circuit (2, see Fig. 1)connected to receive an output from the modulator (Sit) and an output from the pre-preamble modulator (Pt); and
- an output stage connected to an output of the summation circuit (Si & Pt, see Fig. 1); wherein a pre-preamble signal generated by the pre-preamble modulator alerts the output stage of an impending data burst (see Fig. 1, col. 5, line 21 to col. 6, line 24).

-Regarding to claim 2, Miyashita et al disclose that the pre-preamble modulator produces a carrier at a frequency outside of a normal data band (see Si&Pt where a triangle wave outside of the base band, Fig. 2).

-Regarding to claim 3, Miyashita et al disclose that the carrier is Amplitude Shift Key modulated (see MODULATED Pt of Fig. 3).

***Claim Rejections – 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita et al (6,813,326).

-Regarding to claim 4, Miyashita et al does not specifically disclose that a diplexer connected between the output stage and a transverter (antenna).

However, using a diplexer between an output stage and antenna for using the antenna as a 2-way communicator is well-known in the art, and the examiner takes Official Notice.

It would have been obvious for one skilled in the art to implement, in Miyashita et al, a diplexer between the output stage and the antenna so that the antenna is able to transmit and receive signals in two-way communications.

***Allowable Subject Matter***

5. Claims 5-7 are allowed.

Regarding to claim 5, the prior art of record fails to teach a transverter control system for a wireless MODEM wherein a control path comprising:

a band pass filter having an input connected to the upstream signal; and

a detector and demodulator unit connected to the band pass filter;

wherein the detector and demodulator unit outputs a control signal to control the upconverter and the transmitter switch based on a pre-preamble signal received from the wireless modem unit.

Regarding claim 6, the prior art of record fails to teach a transverter control system for a wireless modem wherein a control path comprising:

a band pass filter having an input connected to the upstream signal; and  
a detector and demodulator unit connected to the band pass filter;  
wherein the detector and demodulator unit outputs a control signal to control  
the upconverter and the transmitter switch based on a pre-preamble signal  
received from the wireless modem unit.

Regarding to claim 7, the prior art of record fails to teach a method of  
control of a transverter in a wireless MODEM, the method comprising:

the detecting the pre-preamble signal at the transverter, and in response  
to the detected signal, disabling a transmitter switch;

decoding and processing the control data signal; and resetting the  
transmitter switch.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications  
from the examiner should be directed to Sanh D Phu whose telephone number  
is (703) 305-8635. The examiner can normally be reached on 8:00-16:30.


The fax phone number for the organization where this application or  
proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-8635.

Sanh D. Phu  
Examiner  
Art Unit 2682

SP



VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
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